

ABSTRACT OF THE DISCLOSURE

In a positioning control device for a two-stage actuator having a coarse-movement actuator and a fine-movement actuator, a notch filter having a cutoff frequency  $f_n$  is provided to a coarse-movement control loop, and the fine-movement actuator is driven by a sine wave of the frequency  $f_n$ . At the frequency  $f_n$ , a head position signal becomes identical with an output signal of the fine-movement actuator, by which the gain of the fine-movement actuator can be estimated by an adaptive identification unit with high accuracy based on the control input to the fine-movement actuator and the head position signal.